Periscope.

PATHOLOGY.

202. ZUR KLINISCHEN PATHOLOGIE DES PERIPHEREN NERVENSYSTEMS BEI LUNGENTUBERCULOSE MIT SPECIELLER RÜCKSICHTSNAHME AUF AKROPARASTHESIEN (Contribution to the Clinical Pathology of the Peripheral Nervous System in Pulmonary Tuberculosis, with Special Regard to Akroparesthesia). Rudolf Schmidt (Wiener klin. Wochenschrift, Nos. 27, 28, and 29, pp. 721, 746, and 770, 1899).

Schmidt writes a lengthy paper on the alteration of the peripheral nerves in pulmonary tuberculosis, and quotes the opinions of many authors. His most important conclusions are:

1. The alterations of the peripheral nerves associated with pulmonary tuberculosis are:

(a) Disturbances of a local character, usually of a mechanical origin, more rarely of a toxic, dependent on the position of the nerve near the focus of infection (plexus brachialis, nervi intercostales, nervus recurrens, etc.).

(b) Disturbances from toxic substances producing more diffuse results.

2. Among the symptoms classed under (a) the phenomena of unilateral plexus pain on pressure and of homolateral akroparesthesia (often located in the distribution of the ulnar nerve) are worthy of special mention, as occurring especially in the early forms of pulmonary tuberculosis.

3. Tuberculosis, especially in youthful persons, must be remembered among the many causes of akroparesthesia.

4. The symptomatic akroparesthesia of phthisical patients is characterized by:

(a) Its frequency in males.

(b) Its frequent association with acute catarrhal pulmonary processes (influenza, bronchitis).

(c) Its unilaterality.

(d) The homolateral plexus pain on pressure.

(e) A parallelism with marked phthisical symptoms (night sweats, evening fever, etc.). SPILLER.

203. DIE DEGENERATION DER MARKHALTIGEN NERVENFASERN DER WIRBELTHIERE UNTER HAUPTSÄCHLICHER BERUCKSICHTIGUNG DES VERHALTENS DER PRIMITIV FIBRILLEN (Degeneration of Medullated Nerve Fibers). G. Mönckeberg and A. Bethe (Archiv. f. mikroskopische Anatomie u. Entwicklungsgeschichte, Vol. 54, 1899, p. 135).

The authors describe some results by new methods of investigation on the histological characters of the primitive fibrillæ in a number of animals, and the pathology of degeneration. They state that the axis cylinders of medullated nerve fibers in vertebrates consist of individual primitive fibrillæ, sharply outlined, and a homogeneous perifibrillar substance which surrounds them. Every fibril throughout the nerve fiber has a uniform caliber and has no knobs at the nodes of Ranvier. At such places the perifibrillary substance is absent, and thus has no place as a conducting element. The sheath of Schwann sends down processes at the nodes, and is broken by these as the myelin sheath is divided. The first change in a nerve following a lesion is a change in the staining qualities of the fibrils; following this the fibrils themselves degenerate. The degenerated fibrils form large granular bodies, which break down into smaller ones, and later are absorbed. The perifibrillary substance shows granular changes. JELLIFFE.

204. WEITERER BEITRAG ZUR LEHRE VON DER ACUTEN NICHT-EITRIGEN ENCEPHALITIS UND DER POLIENCEPHALOMYELITIS. (A Further Contribution to the Study of Acute Non-purulent Encephalitis and of Poliencephalomyelitis). H. Oppenheim (Deutsche Zeitschrift für Nervenheilkunde, Vol. 15, 1899, Nos. 1 and 2, p. 1).

An anemic girl, of sixteen years, had headache, loss of appetite, and gastric disturbance for several weeks. Headache became more severe, and vomiting, vertigo, chills and fever were added to the symptom-complex. The left abducens became paretic. The left side of the neck and head and the mastoid process of the left side were very sensitive to pressure, and the presence of empyema of the mastoid process and sinus thrombosis was suspected, although the otoscopic examination was negative. Operation revealed nothing abnormal in the region of the mastoid process, but four days later complete motor aphasia and right facio-brachial monoplegia developed. Other symptoms were noted. A diagnosis of non-purulent encephalitis was made, chiefly from the combination of focal signs with the symptoms of a general febrile disease. The patient died after a few months from purulent meningitis; and in addition to the lesions of this disease, two sclerotic foci—evidently the remains of lesions that had caused the focal symptoms—were found in the left third frontal gyrus and the foot of the anterior central convolution. This case shows that acute non-purulent encephalitis is not always fatal. The spontaneous pain and pain on pressure in the region of the left ear, that led to the mistaken diagnosis of mastoid disease, and the presence of abducens paresis, were interesting features in a case of encephalitis.

In a second case, in which the diagnosis of poliencephalomyelitis was made, the lesions were very slight. Diminution of the electrical reaction in the masseter muscles, incontinence of urine, absence of symptoms of exhaustion, and absence of remissions, were employed in diagnosticating between poliencephalomyelitis and asthenic bulbar paralysis. A lymphosarcoma in the anterior mediastinum was believed to be the source of toxic products. SPILLER.

205. NOTES ON THE CHROMOPHILIC MATERIAL IN THE MOTOR CELLS OF BRAIN AND CORD, NORMAL (ANIMAL) AND PATHOLOGICAL (HUMAN), AND OF THE REACTION (ACID OR ALKALINE) OF THE CORTEX AND CEREBROSPINAL FLUID. John Turner (Brain, 22, 1899, p. 100).

The author presents the results of a number of studies on various points connected with the chemistry of chromophilic bodies. In a first series of observations he concludes:

1. Chromophilic material in the form of Nissl bodies is met with in animals immediately after killing and in human beings at least seventy minutes after death, when the nervous substance has merely been colored by a solution of methylene blue in normal salt without any further addition of reagents.

2. The fact that in some forms of diseased nerve cells the Nissl bodies show a gradual attenuation so that they dwindle down from bulky spindles and blocks to the finest imaginable threads is opposed to the idea that they are produced by precipitation after death.